IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**INVENTOR:** 

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TITLE:

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KEYLESS LOCKING DEVICE

**ABSTRACT** 

A keyless locking device having a cylindrical plunger having a near end and a distal end and

a key thereon. The key is at a prescribed distance from the near end and at an axial location on the

circumference of the plunger. The device further has a cylindrical sleeve for releasably and rotatably

receiving the plunger. The sleeve has an open top portion, a bottom portion and a circumferential lip

within the sleeve separating the top and bottom portions. The lip has a bottom surface. A keyway is

provided in the sleeve and is axially disposed therein. The keyway passes through the top portion of

the sleeve and through the lip. The key on the plunger slidably mates with the keyway.

In one preferred embodiment, indicia are circumferentially disposed about the sleeve, whereas

in another embodiment indicia are circumferentially disposed about the near end of the plunger. In the

first embodiment where the indicia is on the sleeve, a known indicium is substantially axially aligned

with the location of the keyway. In the second embodiment, where the indicia is on the plunger, a

known indicium is axially aligned with the location of the key.

On the plunger, the distance between the key and the near end of the plunger is sufficient to

permit the key to extend into the bottom member below the lip and maintain the near end of the

plunger outside the sleeve. A spring member is provided within the bottom portion of the sleeve and

is compressed when in contact with the distal end of the plunger, biasing the plunger upward.

In order to lock the device the plunger is inserted into the sleeve, the key sliding along the

keyway through the lip into the bottom portion, the distal end compressing the spring member.

Subsequently, the sleeve and plunger are rotated with respect to each other and released. The spring

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then biases the plunger upward and locks the key onto the bottom surface of the lip. Optionally, the bottom of the surface has a plurality of key grooves that mate with the key to hinder rotation of the plunger with respect to the sleeve. In order to unlock the device, the sleeve and plunger are pressed together and rotated with respect to each other until the key and keyway are aligned with each other by noting the position of the known indicium with the keyway or key. The plunger is then removed from the sleeve, the key sliding along the keyway through the lip and into the top portion of the sleeve.

The locking device may, for example, be conveniently used to lock a handbag in the closed position by attaching one of the sleeve or plunger to the zipper grasp and the other to the handbag near the position the grasp is in when the zipper is closed. Optionally, either the plunger or sleeve may be permanently affixed to the device to be locked.

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